

**REMARKS**

Applicants appreciate the Examiner's recognition of the allowable subject matter recited in claims 6-8, 14-16 and 20.

Applicants have amended claims 6, 7, 14, 15, 18 and 19 as suggested by the Examiner. The claims are now in independent form and recite the features of their respective base claims. Accordingly, claims 6-8, 14-16 and 20 are in immediate condition for allowance.

Claims 1-5 and 9-13 stand rejected under 35 USC 102(e) over Lee (U.S. Patent No. 6,266,315). Applicants traverse the rejection. Applicants have amended claim 1 to recite the features of claim 2 and have also amended claim 9 to recite the features of claim 10. Claims 2-4, 10-12 and 17 have been canceled.

Claim 1 recites an optical system comprising a light source and a reflection converging optical system. The reflection converging optical system further comprises a first reflection surface for reflecting light that has been emitted from the light source and "taken in said reflection converging optical system ... sideways with respect with respect to a light-converging axis of said reflection converging optical system." Lee does not disclose or suggest taking emitted light into the first reflection surface sideways with respect to the light-converging axis as recited in claim 1.

The Examiner has asserted that Figure 6 of Lee depicts that "the emitted light is traveling sideways before it is reflected by the first reflection surface." Applicants are uncertain as to the meaning of the Examiner's rejection.

If the Examiner is asserting that the emitted light 10 in Figure 6 of Lee is traveling in a sideways direction before it contacts the mirror, applicants agree. However, the path of the emitted light 10 prior to contacting the mirror 67 is irrelevant to the invention as recited in claim 1. Claim 1 recites emitted light entering the reflection converging optical system while traveling sideways with respect to the light-converging axis. In Figure 6 of Lee, the light reflected from the mirror is the light that enters the optical focusing system 30 (which may be likened to the reflection converging optical system) while traveling essentially parallel to the light-converging

axis. In contrast, Figure 7 of the application depicts an illustrative example of emitted light traveling sideways while contacting the reflection converging optical system as recited in claim 1.

If, however, the Examiner is asserting that the mirror 67 in Figure 6 of Lee is the first reflection surface and therefore a part of the reflection converging optical system, applicants respectfully disagree. As explained in col. 10, lines 7-32, of Lee, the mirror 67 is not part of the “optical focusing system” 30. Therefore, light contacting the mirror 67 can not be considered to be light entering the reflection converging optical system, nor can the mirror 67 be considered to be the first reflecting surface of the “optical focusing system” 30. In Lee, the first reflection surface is identified by reference numeral 313, while the second reflection surface is identified by reference numeral 315. The second reflection surface 315 of Lee corresponds to the first reflection surface recited in claim 1. Again, the light entering the reflection converging optical system and contacting the first reflection surface in Figure 6 of Lee is essentially parallel to the light-converging axis and is not “sideways with respect with respect to a light-converging axis of said reflection converging optical system” as recited in claim 1.

Since Lee does not disclose a first reflection surface for reflecting light that has been emitted from the light source and “taken in said reflection converging optical system ... sideways with respect with respect to a light-converging axis of said reflection converging optical system,” as claimed in claim 1, the rejection of claim 1 is should be withdrawn.

As in claim 1, claim 9 recites a reflection converging optical system comprising a first reflection surface for reflecting light that has been emitted from the light source and “taken in said reflection converging optical system ... sideways with respect with respect to a light-converging axis of said reflection converging optical system.” Claim 9 is therefore allowable for the reasons detailed above with respect to claim 1 and the rejection of claim 9 should therefore be withdrawn.


The rejection of claim 5 which depends from claim 1, claim 8 which depends from claim 7, claim 13 which depends from claim 9, and claim 20 which depends from claim 19, should also be withdrawn.

An early action allowing all of the pending claims, 1, 5-9, 13-16 and 18-22, is solicited.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief, including extensions of time, and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing our Docket No. 325772020700.

Dated: November 22, 2004

Respectfully submitted,

By:   
Adam Keser  
Registration No. 54,217  
Morrison & Foerster LLP  
1650 Tysons Boulevard, Suite 300  
McLean, VA 22102  
Telephone: (703) 760-7700  
Facsimile: (703) 760-7777